Amendment under 37 CFR §1.116
Application No. 10/615,193
Attorney Docket No. 000138A

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Amend the paragraph beginning on page 36, line 16 to read as follows:

The Fe-based alloy material 50 was heated from about a room temperature to 740 °C (the point A_1) at the average heating rate H_R set at 2.9 °C/sec, 4.7 °C/sec, 6.4 °C/sec and 7.2 °C/sec. The relationship between the average temperature of the material 50 and the difference ΔT between the temperatures at the casting reference-temperature point P and the highest-temperature point Q was examined, thereby providing a result shown in Fig. 22. The term "average temperature" as used herein means an average value $(T_E + T_F)/2$ of temperatures T_E and T_F at the points E and F. The maximum temperature gradient T_G was calculated from a maximum value of the temperature differences ΔT and the distance $d \approx 34$ mm between both the points E and F. The relationship between the maximum temperature gradient T_G and the average heating temperature H_R was examined, thereby providing a result shown in Fig. 23. When the average heating temperature H_R was set at 4.7°C/sec in this heating test, cracks were not generated in the Fe-based alloy material, but when the average heating rate H_R was set at 6. 4°C/sec, cracks were generated in the Fe-based alloy material.